

Date: Wednesday, 22/10/2008 7:05:35 AM
 User: Linda Lacelle

Process Sheet

Customer : CC-DAR01 Dart Aerospace Ltd.

Drawing Name : D412-664-205

Job Number : 42773

Estimate Number : 10804

P.O. Number :

Part Number : D412664205

This Issue : 22/10/2008 S.O. No. :

Drawing Number : REWORK

Prsht Rev. : NC

Project Number :

First Issue : 21/10/2008 Type : CROSSTUBES

Drawing Revision :

Previous Run : 00015

Material :

Due Date : 28/10/2008 Qty: 1 Um: Each

Written By : _____

Checked & Approved By : _____

Comment : _____

Additional Product

Job Number:



DART Dart Aerospace Ltd. 1270 ABERDEEN ST HAWKESBURY ON CANADA K6A 4K7		TC APPROVAL # 00-89 TEL: 1-613-632-5200	
P/N	D412-664-205	CHG	CHG001
DESC	Crosstube Aft Low Narrow	SIC	SH01-9
LOT	B37701	SIC	SR01298NY
MATERIAL	Bell 412	SIC	
MADE IN CANADA		0272941	

Seq. #: Machine Or Operation:

Description :

1.0

D412664205

Crosstube, Low Narrow Aft, 412CF



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)
 Crosstube, Low Narrow Aft, 412CF

Pulled from stock B37701. CHG 001
 Used for test project 00257A

2.0

SPRAY PAINTING

SPRAY PAINTING



Comment: SPRAY PAINTING

-Disassemble the tube, and save and identify all the hardware.
 -Wash the outside surface of the tube with wash'n'wipe 4105
 -Sand the outside of the tube with 320 grit paper.
 -Re-paint in accordance with QSI005.

RT 08-10-29

3.0

QC14

INSPECT SPRAY PAINT



m 08 10 30 (1)



Comment: INSPECT SPRAY PAINT

4.0

D2856600

Abrasion Strip



Comment: Qty.: 1.7640 f(s)/Unit Total: 1.7640 f(s)
 Pick:


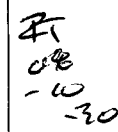
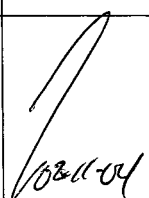
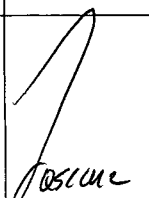

Qty Part number Description Batch
 2 D2856-600(Cut to 10.090") Abrasion Strip 36396

RT 08-10-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D412-664-205 PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: LA Date: 08.11.10

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: 42773		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08/10/30	2.0	Duckins Dis-assembly it was found that all four (Qty x 4) MS21920-28 clamps were Damaged from test		Scrap and Destroy and Replace Qty 4 4 MS21920-28 B# <u>106847</u> <u>27061030</u>	 08-10-30			 08/10/30

NOTE: Date & initial all entries

Date: Wednesday, 22/10/2008 7:05:35 AM
User: Frida Lacelle

Process Sheet

Customer: CC-DAR01 Dart Aerospace Ltd.

Drawing Name: D412-664-205

Job Number: 42773

Part Number: D412664205

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

CROSSTUBES

CROSSTUBES RESOURCE 1



Comment: CROSSTUBES RESOURCE 1

Assemble as per dwg.

08-10-30

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08.11.04 ①



7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Ensure correct paperwork is included.

New labels with the new batch # are required @ CHG001

Re-package the tube with the original kit, and the new labels.

8.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Ensure correct paperwork is included.



Comment: INSPECT 100% KITS FOR COMPLETENESS

08/11/04

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Return to stock.

Location:

Draft

08/11/04



10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/11/05

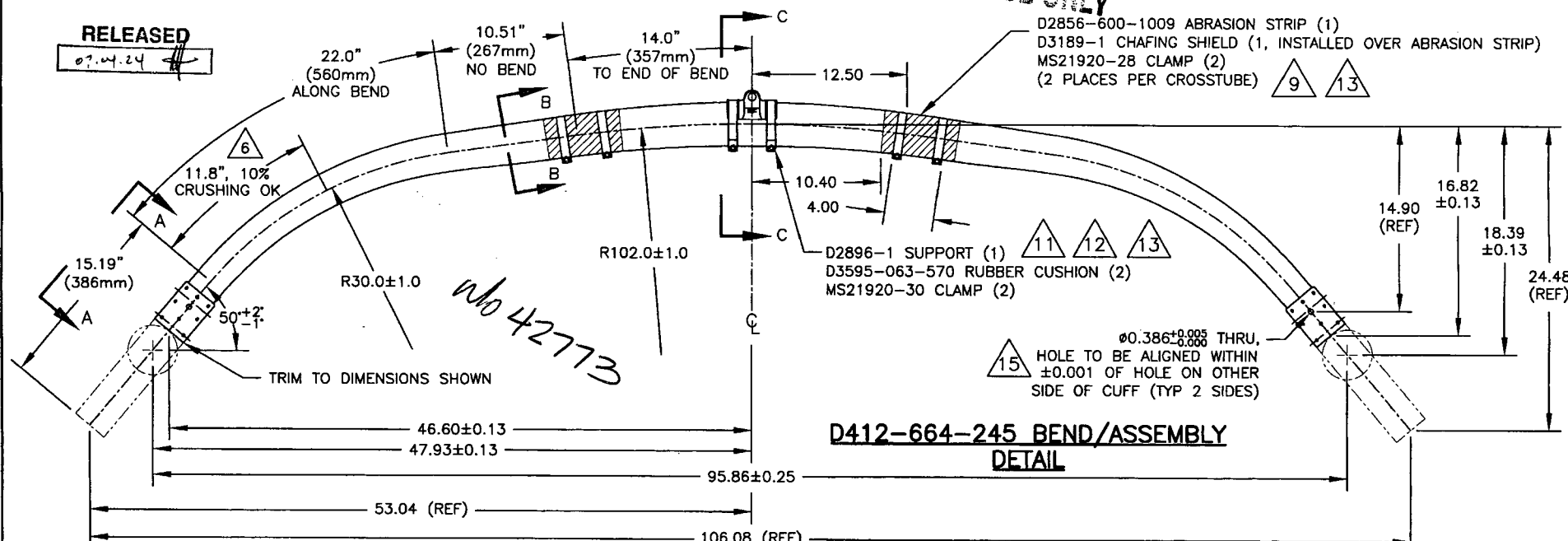
Job Completion



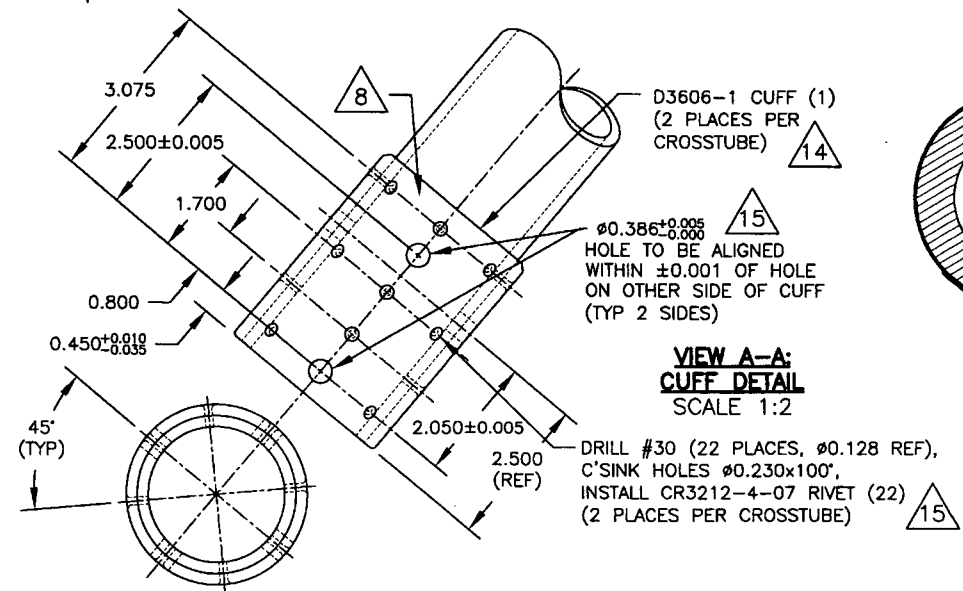
MF 08-11-04

REFERENCE ONLY

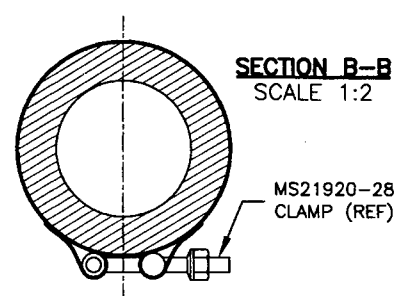
RELEASED



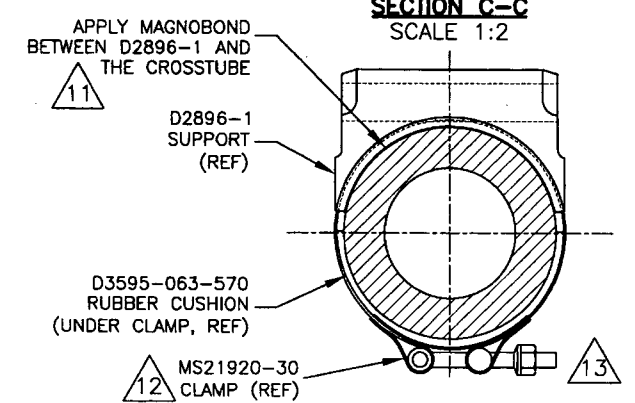
**D412-664-245 BEND/ASSEMBLY
DETAIL**



**VIEW A-A:
CUFF DETAIL
SCALE 1:2**



**SECTION B-B
SCALE 1:2**



**SECTION C-C
SCALE 1:2**

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	CHECKED	APPROVED			
	DATE	TITLE			
	07.03.29	CROSSTUBE (412 LOW-NARROW AFT)			

DART AEROSPACE LTD		Work Order:	42773
Description:		Part Number:	D412-664.205
Dwg:		Qty:	1
		Page of	

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler			
2	FL	Touch up tube & parts from trial installation x D412-664.205 B 42773	MI	09/07/29	①
3	QCB	Inspect touch up	BT	09-07-30	
4	PK	Repackage - ensuring kit is complete using original B/N (redundancy parts)		9/17/30	①
5	QCY	Inspect kit 100% @ CHG001 B42773	S	09/21/30	①
6	QCL21	Inspect Level 21	HJ	09/09/16	①
		ASST A-6 400A 11/17/29 4X		09/27/30	①
				9.9.16	

Rev	Date	Change	Revised By	Approved

Trial Installations

Product: D205 634 011 B48447 / 47907
D412 664 205 B42773
D412 664 105 B39534

Approx Install time: 4 hrs

IIN Accurate and Clear? yes

Comments: _____

Return to stock under original.

Kit Complete and Parts Identified _____

Correctly?

Comments: all complete and well identified

Additional Comments:

All parts fit correctly

Parts require touch up and new hardware

Date: Tuesday, 7/28/09 10:36:40 AM

User: Linda Lacelle

JOB HISTORY : DETAIL

Job Number	: 42773	Customer	: Dart Aerospace Ltd.
Estimate Number	: 10804	DWG Name	: D412-664-205
Purchase Order #	:	Part Number	: D412664205
Complete Date	: 11/04/08 1:22:59 PM	DWG Number	: REWORK
Rev.	:		

DUE DATE	ORDERED	DELIVERED
10/28/08	1	1

1.0	D412664205-Crosstube, Low Narrow Aft, 412CF	INVENTO
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DATE	EMPLOYEE	TYPE	Qty		COST	
11/04/08	FAUT01: Fauteux, Melanie	D412664205	1.000		\$4448.83	Lot # 37701 Qty. 1
Subtotal:	QTD:	0	CTD:	1	\$4448.83	

2.0	SPRAY PAINTING	Internal Operation
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DATE	EMPLOYEE	TYPE	Qty	Time(hrs)	COST	MTime(hrs)	Mach. Cost	
10/28/08	TITL01: Titley, Ian	Run	1.000	0.24	\$3.88	0.24	9.43	
10/28/08	TITL01: Titley, Ian	Run	0.000	0.00	\$0.00	0.93	36.52	
10/28/08	TITL01: Titley, Ian	Run	1.000	0.93	\$15.03	0.00	0.00	PROVR
10/29/08	TITL01: Titley, Ian	Run	0.000	0.00	\$0.00	2.34	91.88	
10/29/08	TITL01: Titley, Ian	Run	1.000	2.34	\$37.81	0.00	0.00	PROVR
10/29/08	TITL01: Titley, Ian	Run	0.000	0.00	\$0.00	1.00	39.27	
10/29/08	TITL01: Titley, Ian	Run	1.000	0.33	\$5.33	0.00	0.00	PROVR
11/03/08	TITL01: Titley, Ian	Run	0.000	1.17	\$18.91	2.34	91.88	
Subtotal:	QTD:	4	CTD:	0	5.01	\$349.94		

4.0	D2856600-Abrasion Strip	INVENTORY ITEM
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DATE	EMPLOYEE	TYPE	Qty		COST	
11/04/08	FAUT01: Fauteux, Melanie	D2856600	1.764		\$11.46	Lot # 36398 Qty. 2
Subtotal:	QTD:	0	CTD:	2	\$11.46	

5.0	MS2192028-Clamp(per MIL-DTL-8783C)	INVENTORY ITEM
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DATE	EMPLOYEE	TYPE	Qty		COST	
11/04/08	FAUT01: Fauteux, Melanie	MS2192028	4.000		\$61.00	Lot # 108847 Qty. 4
Subtotal:	QTD:	0	CTD:	4	\$61.00	

6.0	CROSSTUBES	Internal Operation
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DATE	EMPLOYEE	TYPE	Qty	Time(hrs)	COST	MTime(hrs)	Mach. Cost	
10/30/08	TITL01: Titley, Ian	Run	0.000	0.00	\$0.00	2.65	105.77	
10/30/08	TITL01: Titley, Ian	Run	1.000	2.65	\$42.82	0.00	0.00	PROVR
Subtotal:	QTD:	1	CTD:	0	2.65	\$148.59		

		TIME	COST
	Machine Time:	9.50	\$374.75
	Labor:	7.66	\$123.78
	Sub-contract (external Op.):		\$0.00
	INVENTORY ITEM:		\$4521.29
	SUB-COMPONENT (SUB-JOB):		\$0.00
Total:			\$5019.82
	COST PER UNIT:		\$5019.82

32.11.3 LOW-NARROW GEAR CROSSTUBES

Item	-105	-205	Part Number	Description
	X		D412-664-105	CROSSTUBE INSTALLATION, 412 LOW-NARROW FWD
		X	D412-664-205	CROSSTUBE INSTALLATION, 412 LOW-NARROW AFT
4	1		D412-664-145	CROSSTUBE ASSEMBLY, 412 LOW-NARROW FWD
5		1	D412-664-245	CROSSTUBE ASSEMBLY, 412 LOW-NARROW AFT
10	2		* D2893-1	SUPPORT
11	4		* D3595-063-450	RUBBER CUSHION
12	4		* MS21920-25	CLAMP (OR MS21042-26)
13	4		AN6-35A	BOLT
14	4		AN6-36A	BOLT
15	6		MS21042L6	NUT (OR MS21042-6)
16	18		AN960JD616	WASHER
17	1		* D2856-250-842	ABRASION STRIP
18	1		* D3189-3	CHAFING SHIELD
19	2		* MS21920-22	CLAMP
30		1	* D2896-1	SUPPORT
31		2	* D2856-600-1009	ABRASION STRIP
32		2	* D3595-063-570	RUBBER CUSHION
33		4	* MS21920-28	CLAMP
34		2	* MS21920-30	CLAMP (OR MS21042-32)
35		4	AN6-40A	BOLT
36		2	AN6-41A	BOLT
37		6	MS21042L6	NUT (OR MS21042-6)
38		18	AN960JD616	WASHER
39		2	* D3189-1	CHAFING SHIELD
40		2	* D3606-1	CUFF
41		44	* CR3212-4-07	RIVET (M7885/3-4-07)

* REFERENCE ONLY. PARTS ARE INCLUDED IN D412-664-145/-245 ASSEMBLIES ABOVE.

NOTE: KITS INCLUDE EXTRA HARDWARE FOR COMPATIBILITY WITH BOTH DART AND BELL/AA SKIDTUBES.

42773

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